

HIV/AIDS Epidemiologic Profile of Massachusetts: 2014

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2014, this resulted in the removal of 4,135 HIV/AIDS cases, of which 973 have died and 3,162 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual reported risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual reported risk category was used with the intention of identifying HIV reported risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of men living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual reported risk category. The application of the presumed heterosexual reported risk category to men is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate reported risks that are possible for men, including sex with other men (MSM) or IDU. The CDC reports men diagnosed with HIV/AIDS who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual reported risk categories for women.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2013: Massachusetts²

	N	%
People Living with HIV/AIDS	19,165	59%
People Reported with HIV or AIDS who are Deceased	13,180	41%
Total Number of People Reported with HIV Infection or AIDS	32,345	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 2. Average annual rate of HIV infection diagnosis from 2010 to 2012 and HIV/AIDS prevalence rate on 12/31/13¹: Massachusetts²

Average annual HIV diagnosis rate from 2010–2012	Average rate per 100,000	Average annual number of HIV diagnoses
Massachusetts Total	10.5	688.3
HIV/AIDS prevalence rate on 12/31/13	Rate per 100,000	Number of people living with HIV/AIDS
Massachusetts Total	292.7	19,165

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2003–2012, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2003	14,391	391	958
2004	14,952	353	914
2005	15,517	332	897
2006	16,007	324	814
2007	16,461	286	740
2008	16,909	282	730
2009	17,313	288	692
2010	17,742	260	689
2011	18,212	212	682
2012	18,698	208	694

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size for the assurance of confidentiality. Additional values may be suppressed to prevent back calculation.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 4. People diagnosed with HIV infection from 2010–2012¹ and people living with HIV/AIDS on December 31, 2013 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	1,503	73%	13,680	71%
Female	562	27%	5,485	29%
Place of Birth:	N	%	N	%
US	1,229	60%	12,522	65%
Puerto Rico/US Dependency ³	146	7%	1,949	10%
Non-US	690	33%	4,694	24%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	777	38%	8,297	43%
Black (non-Hispanic)	665	32%	5,745	30%
Hispanic/Latino	533	26%	4,665	24%
Asian/Pacific Islander	66	3%	330	2%
Other/Unknown	24	1%	128	1%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	881	43%	7,137	37%
Injection Drug Use (IDU)	172	8%	3,683	19%
MSM/IDU	63	3%	661	3%
Heterosexual Sex	228	11%	2,720	14%
Other	13	1%	407	2%
Total Undetermined	708	34%	4,557	24%
• Presumed Heterosexual Sex ⁴	255	12%	1,714	9%
• Undetermined ⁵	453	22%	2,843	15%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2013	
Under 13	11	1%	26	<1%
13 to 19	57	3%	99	1%
20 to 24	206	10%	279	1%
25 to 29	234	11%	615	3%
30 to 34	264	13%	889	5%
35 to 39	278	13%	1,310	7%
40 to 44	286	14%	2,033	11%
45 to 49	298	14%	3,409	18%
50 to 54	194	9%	4,078	21%
55 to 59	123	6%	3,161	16%
60+	114	6%	3,266	17%
Total	2,065	100%	19,165	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-eight percent of people diagnosed with HIV infection from 2010–2012 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 5. People living with HIV/AIDS on December 31, 2013 by gender and race/ethnicity: Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	6,927	51%	1,370	25%
Black (non-Hispanic)	3,234	24%	2,511	46%
Hispanic/Latino	3,179	23%	1,486	27%
Asian/Pacific Islander	253	2%	77	1%
Total²	13,680	100%	5,485	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

³ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 6. People living with HIV/AIDS on December 31, 2013 by gender and exposure mode: Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	7,137	52%	N/A	N/A
Injection drug use (IDU)	2,431	18%	1,252	23%
MSM/IDU	661	5%	N/A	N/A
Heterosexual sex	804	6%	1,916	35%
Other	226	2%	181	3%
Total Undetermined	2,421	18%	2,136	39%
• Presumed heterosexual sex ²	N/A	N/A	1,714	31%
• Undetermined ³	2,421	18%	422	8%
Total	13,680	100%	5,485	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Massachusetts¹, 2003–2012²

	Male		Female		Total
	N	%	N	%	
2003	649	68%	309	32%	958
2004	645	71%	269	29%	914
2005	656	73%	241	27%	897
2006	585	72%	229	28%	814
2007	532	72%	208	28%	740
2008	534	73%	196	27%	730
2009	529	76%	163	24%	692
2010	498	72%	191	28%	689
2011	488	72%	194	28%	682
2012	517	74%	177	26%	694

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Massachusetts¹, 2003–2012²

	White (NH)		Black (NH)		Hispanic/Latino		API		Total ³
	N	%	N	%	N	%	N	%	N
2003	382	40%	336	35%	222	23%	12	1%	958
2004	346	38%	305	33%	242	26%	15	2%	914
2005	358	40%	304	34%	217	24%	16	2%	897
2006	339	42%	253	31%	198	24%	19	2%	814
2007	314	42%	234	32%	173	23%	16	2%	740
2008	290	40%	243	33%	163	22%	27	4%	730
2009	279	40%	226	33%	165	24%	19	3%	692
2010	277	40%	214	31%	174	25%	21	3%	689
2011	235	34%	240	35%	169	25%	26	4%	682
2012	265	38%	211	30%	190	27%	19	3%	694

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Totals include American Indian/Alaskan Native individuals and those of other or undetermined race/ethnicity

NH = Non-Hispanic, API = Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/14

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Massachusetts¹, 2003–2012²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	
2003	581	61%	81	8%	296	31%	958
2004	548	60%	99	11%	267	29%	914
2005	540	60%	82	9%	275	31%	897
2006	503	62%	58	7%	253	31%	814
2007	458	62%	56	8%	226	31%	740
2008	443	61%	67	9%	220	30%	730
2009	433	63%	48	7%	211	30%	692
2010	431	63%	43	6%	215	31%	689
2011	407	60%	41	6%	234	34%	682
2012	391	56%	62	9%	241	35%	694

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/14

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Massachusetts¹, 2003–2012²

	MSM		IDU		MSM/ IDU		HTSX		Pres. HTSX ³		Undeter- mined ⁴		Total ⁵
	N	%	N	%	N	%	N	%	N	%	N	%	N
2003	318	33%	146	15%	32	3%	136	14%	129	13%	184	19%	958
2004	292	32%	146	16%	26	3%	137	15%	109	12%	193	21%	914
2005	351	39%	121	13%	22	2%	110	12%	100	11%	188	21%	897
2006	339	42%	96	12%	18	2%	101	12%	102	13%	152	19%	814
2007	292	39%	96	13%	22	3%	81	11%	82	11%	162	22%	740
2008	288	39%	70	10%	29	4%	93	13%	81	11%	163	22%	730
2009	310	45%	46	7%	18	3%	90	13%	64	9%	159	23%	692
2010	292	42%	67	10%	22	3%	84	12%	82	12%	136	20%	689
2011	272	40%	62	9%	19	3%	85	12%	80	12%	161	24%	682
2012	317	46%	43	6%	22	3%	59	9%	93	13%	156	22%	694

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available 10 year period after the implementation of HIV infection reporting in 1999.

³ Includes woman sex with man of unknown HIV status or risk. This category is limited to women.

⁴ Includes man sex with woman of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Totals include pediatric and blood/blood products exposure modes

MSM = Male-to-Male Sex; IDU = Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/14

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Massachusetts¹, 2003–2012²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2003	322	958	34%
2004	331	914	36%
2005	322	897	36%
2006	288	814	35%
2007	263	740	36%
2008	220	730	30%
2009	205	692	30%
2010	223	689	32%
2011	233	682	34%
2012	206	694	30%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

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Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Massachusetts,¹ 2010–2012²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	474	1,503	32%
Female	188	562	33%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	224	777	29%
Black (non-Hispanic)	241	665	36%
Hispanic/Latino	169	533	32%
Asian/Pacific Islander	20	66	30%
Other/Undetermined ³	8	24	33%
Place of Birth:	N	N	%
US	346	1,229	28%
Puerto Rico/US Dependencies ⁴	47	146	32%
Non-US	269	690	39%
Total	662	2,065	32%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2010–2012 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14